

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012210**Date Inspected:** 17-Feb-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang and Wu Zhi Cheng**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Trial Assembly**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 6CE to 7AE (Longitudinal Diaphragm) Joint Survey

This QA Inspector performed Joint Inspection with ZPMC Survey Team and ABF Survey Team for the Longitudinal Diaphragm between Segment 6CE to 7AE (Field Segment Splice) between Panel Point (PP) 47 and PP 48 North(Cross Beam) and South (Bike Path) side for Offset and Sweep. The offset was measured at 5 (five) different locations in which 2 (Two) locations were at Flange area and 3 (Three) locations were at Web area and Sweep was measured at 100 mm from both side from the Floor Beam and 800mm from both side of floor Beam and at Centre (Total 5 Locations). The measured readings were recorded on spread sheet, generated the report and submitted to the Task Leader and Engineer for review.

Segment 6AE (Deck Diaphragm) Individual Survey

This QA Inspector performed Inspection along with Mr. Vikram Singh for the Deck Panel Diaphragm to Deck Panel offset at every alternative U - Ribs (Total 20 Locations) for Segment 6AE at Panel Point (PP) 39 and PP 40

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from North towards South side. The measured readings were recorded generated the report and submitted to the Task Leader and Engineer for review.

6CW

This QA Inspector observed ZPMC welding personnel performing repair welding by Flux Cored Arc Welding (FCAW) for Un-equal angle at the Edge Panel Cross Beam Side. The welding was in progress against B-CWR 1215 Rev.0. The weld joint was identified as SSD30B-PP 44.5-002. The welder is identified as 066673. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-FCAW-2G (2F)-FCM-Repair and WPS-345-FCAW-3G (3F)-FCM-Repair. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

6CW

This QA Inspector observed ZPMC welding personnel performing repair welding by Flux Cored Arc Welding (FCAW) for Vertical Stiffener at the Edge Panel to Side Panel Corner Assembly Cross Beam side. The welding was in progress against B-CWR 1215 Rev.0. The weld joint was identified as Seg 031M-046/047, SSD30C-PP 44.5-168/169 and Seg 031M-054/055. The welder is identified as 066673. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-FCAW-2G (2F)-FCM-Repair and WPS-345-FCAW-3G (3F)-FCM-Repair. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

6CW

This QA Inspector observed ZPMC welding personnel performing repair welding by Shielded Metal Arc Welding (SMAW) for Longitudinal Diaphragm Flange for Segment 6CW at PP 44 Cross Beam side. The weld joint was identified as Seg 031F-008. The welder is identified as 066261. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-1G (1F)-Repair-1.

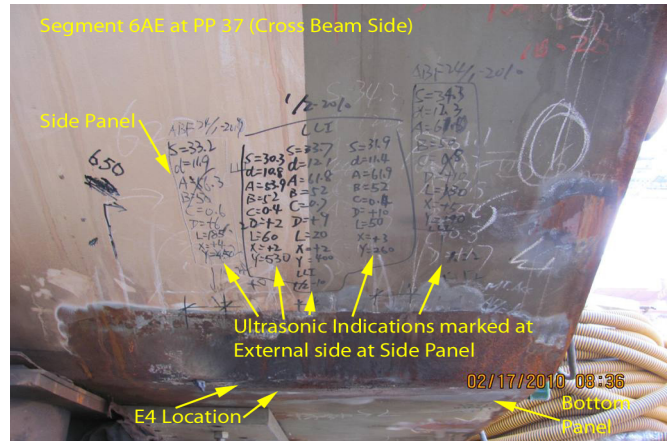
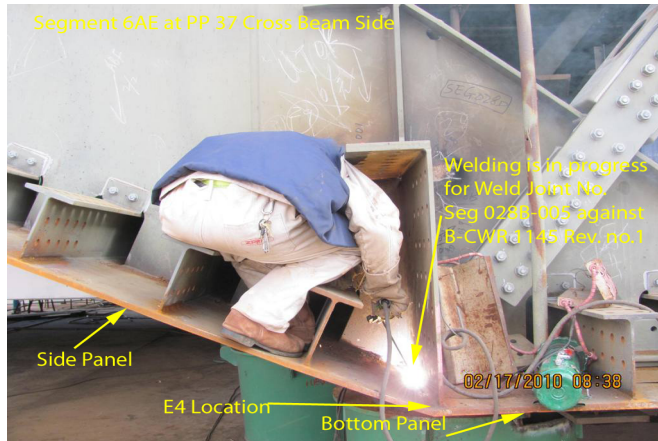
6AE

This QA Inspector observed ZPMC welding personnel performing repair welding by Shielded Metal Arc Welding (SMAW) for Weld connecting the Side Panel to Bottom Panel at E4 location Cross Beam side. The weld joint was identified as Seg028B-005. The welding was in progress against the B-CWR 1145 Rev.1 Dated Feb 02, 2010. The welder is identified as 037740. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-1G (1F)-FCM-Repair-1 and WPS-345-SMAW-4G (4F)-FCM-Repair-1. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS, for more comprehensive details please refer the attached pictures.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric T Sang 1500-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By: Math,Manjunath

Quality Assurance Inspector

Reviewed By: Miller,Mark

QA Reviewer